

Laboratory

CYANIDE COMPOUNDS

Agent Overview: Cyanide, classified as a blood agent, is a rapidly acting, potentially

deadly chemical. Cyanide can exist as a colorless gas, such as hydrogen cyanide (AC) or cyanogen chloride (CK). It can also exist as a crystal form such as sodium cyanide (NaCN) or potassium cyanide (KCN). Severe poisoning can cause slowed breathing (bradypnea), slowed heart rate (bradycardia), cardiovascular collapse and death. Inhalating cyanide gas or ingesting cyanide salts can lead to lethargy or coma, sudden collapse, trouble breathing (dyspnea), rapid breathing (tachypnea), increased heart rate (tachycardia), and a drop in blood pressure (hypotension). Prompt medical attention is necessary in any suspected cyanide poisoning, as well as proper use of antidote kits.

Lab Specimen Submittal: Authorization by Dr. Jane Getchell, Director DPHL; Christina

Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism

Coordinator.

Type of Specimens Urine: 25mL-50mL screw-cap container

Necessary for Testing: Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND

- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND

- Two empty urine cups and two empty blood tubes for each lot #

submitted.

Packaging Instructions: <u>Urine</u>: freeze specimen upon collection and ship on dry ice; label

specimens and package individually; wrap with absorbent material.

<u>Whole blood</u>: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be

shipped cold but *must not* be frozen.

All: wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B

(Packing Instruction 650).

Receiving Specimens

at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.

Handling of Specimens: Follow chain of custody procedures. Freeze urine specimens.

Reporting Results: DPHL is a Cyanide Qualified laboratory. Testing personnel will notify

supervisor or Laboratory Director, Deputy Laboratory Director or Chemical Terrorism Coordinator. The Potential Exposure Call Log and Information form will provide information for notification of testing

results outside of the DPHL.

Contact Information: Jane Getchell, DrPH, Director DPHL, 302-653-2870 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 04/08

Doc. No. 35-05-20/08/04/30